Toward a Metric America

METRIC CONVERSION ACT

Public Law 94-168 December 23, 1975

As Amended byPublic Laws 100-418, August 23, 1988 104-66, December 21, 1995 & 104-289, October 11, 1996

Be it enacted by the Senate and House of Representatives of the United States of America in Congress Assembled, That this Act may be cited as the "Metric Conversion Act of 1975". Sec. 2. The Congress finds as follows:

- (1) The United States was an original signatory party to the 1875 Treaty of the Meter (20 Stat. 709), which established the General Conference of Weights and Measures, the International Committee of Weights and Measures and the International Bureau of Weights and Measures.
- (2) Although the use of metric measurement standards in the United States has been authorized by law since 1866 (Act of July 28 1866; 14 Stat. 339), this Nation today is the only industrially developed nation which has not established a national policy of committing itself and taking steps to facilitate conversion to the metric system.
- (3) World trade is increasingly geared towards the metric system of measurement.
- (4) Industry in the United States is often at a competitive disadvantage when dealing in international markets because of its nonstandard measurement system, and is sometimes excluded when it is unable to deliver goods which are measured in metric terms.
- (5) The inherent simplicity of the metric system of measurement and standardization of weights and measures has led to major cost savings in certain industries which have converted to that system.
- (6) The Federal Government has a responsibility to develop procedures and techniques to assist industry, especially small business, as it voluntarily converts to the metric system of measurement.
- (7) The metric system of measurement can provide substantial advantages to the Federal Government in its own operations.
- SEC. 3. It is therefore the declared policy of the United States --
- (1) to designate the metric system of measurement as the preferred system of weights and measures for United States trade and commerce;
- (2) to require that each Federal agency, by a date certain and to the extent economically feasible by the end of the fiscal year 1992, use the metric system of measurement in its procurements, grants, and other business-related activities, except to the extent that such use is impractical or is likely to cause significant inefficiencies or loss of markets to United States firms, such as when foreign competitors are producing competing products in non-metric units;

(3) to seek out ways to increase understanding of the metric system of measurement through educational information and guidance and in Government publications; and (4) to permit the continued use of traditional systems of weights and measures in nonbusiness activities.

SEC. 4. As used in this Act, the term-

- (1) "Board" means the United States Metric Board, established under section 5 of this Act:
- (2) "engineering standard" means a standard which prescribes (A) a concise set of conditions and requirements that must be satisfied by a material, product, process, procedure, convention, or test method; and (B) the physical, functional, performance and/or conformance characteristics thereof;
- (3) "international standard or recommendation" means an engineering standard or recommendation which is (A) formulated and promulgated by an international organization and (B) recommended for adoption by individual nations as a national standard;
- (4) "metric system of measurement" means the International System of Units as established by the General Conference of Weights and Measures in 1960 and as interpreted or modified for the United States by the Secretary of Commerce;
- (5) Afull and open competition@has the same meaning as defined in section 403(6) of title 41, United States Code;
- (6) Atotal installed price@means the price of purchasing a product or material, trimming or otherwise altering some or all of that product or material, if necessary to fit with other building components, and then installing that product or material into a Federal facility;
- (7) Ahard-metric@means measurement, design, and manufacture using the metric system of measurement, but does not include measurement, design, and manufacture using English system measurement units which are subsequently reexpressed in the metric system of measurement;
- (8) Acost or pricing data or price analysis@has the meaning given such terms in section 304A of the Federal Property and Administrative Services Act of 1949 (41 U.S.C. 254b); and
- (9) AFederal facility@means any public building (as defined under section 13 of the Public Buildings Act of 1959 (40 U.S.C. 612) and shall include any Federal building or construction project--
 - (A) on lands in the public domain;
- (B) on lands used in connection with Federal programs for agriculture research, recreation, and conservation programs;
- (C) on or used in connection with river, harbor, flood control, reclamation, or power projects;
 - (D) on or used in connection with housing and residential projects;

- (E) on military installations (including any fort, camp, post, naval training station, airfield, proving ground, military supply depot, military school, or any similar facility of the Department of Defense);
- (F) on installations of the Department of Veteran Affairs used for hospital or domiciliary purposes; or
- (G) on lands used in connection with Federal prisons, but does not include (i) any Federal Building or construction project the exclusion of which the President deems to be justified in the public interest, or (ii) any construction project or building owned or controlled by a State government, local government, Indian tribe, or any private entity.
- SEC. 5. (a) There is established, in accordance with this section, an independent instrumentality to be known as a United States Metric Board.
- (b) The Board shall consist of 17 individuals, as follows:
 - (1) the Chairman, a qualified individual who shall be appointed by the President, by and with the advice and consent of the Senate;
 - (2) sixteen members who shall be appointed by the President, by and with the advice and consent of the Senate, on the following basis-
 - (A) one to be selected from lists of qualified individuals recommended by engineers and organizations representative of engineering interests;
 - (B) one to be selected from lists of qualified individuals recommended by scientists, the scientific and technical community, and organizations representative of scientists and technicians;
 - (C) one to be selected from a list of qualified individuals recommended by the National Association of Manufacturers or its successor;
 - (D) one to be selected from lists of qualified individuals recommended by the United States Chamber of Commerce, or its successor, retailers, and other commercial organizations;
 - (E) two to be selected from lists of qualified individuals recommended by the American Federation of labor and Congress of Industrial Organizations or its successor, who are representative of workers directly affected by metric conversion, and by other organizations representing labor;
 - (F) one to be selected from a list of qualified individuals recommended by the National Governors Conference, the National Council of State legislatures, and organizations representative of State and local government;
 - (G) two to be selected from lists of qualified individuals recommended by organizations representative of small business;
 - (H) one to be selected from lists of qualified individuals representative of the construction industry;
 - (I) one to be selected from a list of qualified individuals recommended by the National Conference on Weights and Measures and standards making organizations;
 - (J) one to be selected from lists of qualified individuals recommended by educators, the educational community, and organizations representative of educational interests; and

(K) four at-large members to represent consumers and other interests deemed suitable by the President and who shall be qualified individuals.

As used in this subsection, each "list" shall include the names of at least three individuals for each applicable vacancy. The terms of office of the members of the Board first taking office shall expire as designated by the President at the time of nomination; five at the end of the 2nd year; five at the end of the 4th year; and six at the end of the 6th year. The term of office of the Chairman of such Board shall be 6 years. Members, including the Chairman, may be appointed to an additional term of 6 years, in the same manner as the original appointment. Successors to members of such Board shall be appointed in the same manner as the original members and shall have terms of office expiring 6 years from the date of expiration of the terms for which their predecessors were appointed. Any individual appointed to fill a vacancy occurring prior to the expiration of any term of office shall be appointed for the remainder of that term. Beginning 45 days after the date of incorporation of the Board, six members of such Board shall constitute a quorum for the transaction of any function of the Board.

(c) Unless otherwise provided by the Congress, the Board shall have no compulsory powers.

- (d) The Board shall cease to exist when the Congress, by law, determines that its mission has been accomplished.
- SEC. 6. It shall be the function of the Board to devise and carry out a broad program of planning, coordination, and public education, consistent with other national policy and interests, with the aim of implementing the policy set forth in this Act. In carrying out this program, the Board shall--
- (1) consult with and take into account the interests, views, and conversion costs of United States commerce and industry, including small business; science; engineering; labor; education; consumers; government agencies at the Federal, State, and local level; nationally recognized standards developing and coordinating organizations; metric conversion planning and coordinating groups; and such other individuals or groups as are considered appropriate by the Board to the carrying out of the purposes of this Act. The Board shall take into account activities underway in the private and public sectors, so as not to duplicate unnecessarily such activities;
- (2) provide for appropriate procedures whereby various groups, under the auspices of the Board, may formulate, and recommend or suggest, to the Board specific programs for coordinating conversion in each industry and segment thereof and specific dimensions and configurations in the metric system and in other measurements for general use. Such programs, dimensions, and configurations shall be consistent with (A) the needs, interests, and capabilities of manufacturers (large and small), suppliers, labor, consumers, educators, and other interested groups, and (B) the national interest; (3) publicize, in an appropriate manner, proposed programs and provide an opportunity for interested groups or individuals to submit comments on such programs. At the request of interested parties, the Board, in its discretion, may hold hearings with regard to such programs. Such comments and hearings may be considered by the Board;

- (4) encourage activities of standardization organizations to develop or revise, as rapidly as practicable, engineering standards on a metric measurement basis, and to take advantage of opportunities to promote (A) rationalization or simplification of relationships, (B) improvements of design, (C) reduction of size variations, (D) increases in economy, and (E) where feasible, the efficient use of energy and the conservation of natural resources:
- (5) encourage the retention, in new metric language standards, of those United States engineering designs, practices, and conventions that are internationally accepted or that embody superior technology;
- (6) consult and cooperate with foreign governments, and intergovernmental organizations, in collaboration with the Department of State, and, through appropriate member bodies, with private international organizations, which are or become concerned with the encouragement and coordination of increased use of metric measurement units or engineering standards based on such units, or both. Such consultation shall include efforts, where appropriate, to gain international recognition for metric standards proposed by the United States, and, during the United States conversion, to encourage retention of equivalent customary units, usually by way of dual dimensions, in international standards or recommendations;
- (7) assist the public through information and education programs, to become familiar with the meaning and applicability of metric terms and measures in daily life. Such programs shall include--
 - (A) public information programs conducted by the Board, through the use of newspapers, magazines, radio, television, and other media, and through talks before appropriate citizens' groups, and trade and public organizations;
 - (B) counseling and consultation by the Secretary of Education; the Secretary of Labor; the Administrator of the Small Business Administration; and the Director of the National Science Foundation, with educational associations, State and local educational agencies, labor education committees, apprentice training committees, and other interested groups, in order to assure (i) that the metric system of measurement is included in the curriculum of the Nation's educational institutions, and (ii) that teachers and other appropriate personnel are properly trained to teach the metric system of measurement;
 - (C) consultation by the Secretary of Commerce with the National Conference of Weights and Measures in order to assure that State and local weights and measures officials are (i) appropriately involved in metric conversion activities and (ii) assisted in their efforts to bring about timely amendments to weights and measures laws; and (D) such other public information activities, by any Federal agency in support of this Act, as relate to the mission of such agency;
- (8) collect, analyze, and publish information about the extent of usage of metric measurements; evaluate the costs and benefits of metric usage; and make efforts to minimize any adverse effects resulting from increasing metric usage;
- (9) conduct research, including appropriate surveys; publish the results of such research; and recommend to the Congress and to the President such action as may be appropriate

to deal with any unresolved problems, issues, and questions associated with metric conversion, or usage, such problems, issues, and questions may include, but are not limited to, the impact on workers (such as costs of tools and training) and on different occupations and industries, possible increased costs to consumers, the impact on society and the economy, effects on small business, the impact on the international trade position of the United States, the appropriateness of and methods for using procurement by the Federal Government as a means to effect conversion to the metric system, the proper conversion or transition period in particular sectors of society, and consequences for national defense;

- (10) submit annually to the Congress and to the President a report on its activities. Each such report shall include a status report on the conversion process as well as projections for the conversion process. Such report may include recommendations covering any legislation or executive action needed to implement the programs of conversion accepted by the Board. The Board may also submit such other reports and recommendations as it deems necessary; and
- (11) submit to the Congress and to the President, not later than 1 year after the date of enactment of the Act making appropriations for carrying out this Act, a report on the need to provide an effective structural mechanism for converting customary units to metric units in statutes, regulations, and other laws at all levels of government, on a coordinated and timely basis, in response to voluntary conversion programs adopted and implemented by various sectors of society under the auspices and with the approval of the Board. If the Board determines that such a need exists, such report shall include recommendations as to appropriate and effective means for establishing and implementing such a mechanism.

SEC. 7. In carrying out its duties under this Act, the Board may

- (1) establish an Executive Committee, and such other committees as it deems desirable;
- (2) establish such committees and advisory panels as it deems necessary to work with the various sectors of the Nation's economy and with Federal and State governmental agencies in the development and implementation of detailed conversion plans for those sectors. The Board may reimburse, to the extent authorized by law, the members of such committees;
- (3) conduct hearings at such times and places as it deems appropriate;
- (4) enter into contracts, in accordance with the Federal Property and Administrative Services Act of 1949, as amended (40 U.S.C. 471 et seq.), with Federal or State agencies, private firms, institutions, and individuals for the conduct of research or surveys, the preparation of reports, and other activities necessary to the discharge of its duties:
- (5) delegate to the Executive Director such authority as it deems advisable; and
- (6) perform such other acts as may be necessary to carry out the duties prescribed by this Act.

- SEC. 8. (a) The Board may accept, hold, administer, and utilize gifts, donations, and bequests of property, both real and personal, and personal services, for the purpose of aiding or facilitating the work of the Board. Gifts and bequests of money, and the proceeds from the sale of any other property received as gifts or requests, shall be deposited in the Treasury in a separate fund and shall be disbursed upon order of the Board.
- (b) For purpose of Federal income, estate, and gift taxation, property accepted under subsection (a) of this section shall be considered as a gift or bequest to or for the use of the United States.
- (c) Upon the request of the Board, the Secretary of the Treasury may invest and reinvest, in securities of the United States, any moneys contained in the fund authorized in subsection (a) of this section. Income accruing from such securities, and from any other property accepted to the credit of such fund, shall be dispersed upon the order of the Board.
- (d) Funds not expended by the Board as of the date when it ceases to exist, in accordance with section 5(d) of this Act, shall revert to the Treasury of the United States as of such date.
- SEC. 9. Members of the Board who are not in the regular full-time employ of the United States shall, while attending meetings or conferences of the Board or while otherwise engaged in the business of the Board, be entitled to receive compensation at a rate not to exceed the daily rate currently being paid grade 18 of the General Schedule (under section 5332 of title 5), including travel time. While so serving, on the business of the Board away from their homes or regular places of business, members of the Board may be allowed travel expenses, including per diem in lieu of subsistence, as authorized by section 5703 of title 5, for persons employed intermittently in the Government service. Payments under this section shall not render members of the Board employees or officials of the United States for any purpose. Members of the Board who are in the employ of the United States shall be entitled to travel expenses when traveling on the business of the Board.
- SEC. 10. (a) The Board shall appoint a qualified individual to serve as the Executive Director of the Board at the pleasure of the Board. The Executive Director, subject to the direction of the Board, shall be responsible to the Board and shall carry out the metric conversion program, pursuant to the provisions of this Act and the policies established by the Board.
- (b) The Executive Director of the Board shall serve full time and be subject to the provisions of chapter 51 and subchapter III of chapter 53 of title 5. The annual salary of the Executive Director shall not exceed level III of the Executive Schedule under section 5314 of such title.
- (c) The Board may appoint and fix the compensation of such staff personnel as may be necessary to carry out the provisions of this Act in accordance with the provisions of chapter 51 and subchapter III of chapter 53 of title 5.

- (d) The Board may (1) employ experts and consultants or organizations thereof, as authorized by section 3109 of title 5; (2) compensate individuals so employed at rates not in excess of the rate currently being paid grade 18 of the General Schedule under section 5332 of such title, including travel-time; and (3) may allow such individuals, while away from their homes or regular places of business, travel expenses (including per diem in lieu of subsistence) as authorized by section 5703 of such title 5 for persons in the Government service employed intermittently: *Provided, however* That contracts for such temporary employment may be renewed annually.
- SEC. 11. Financial and administrative services, including those related to budgeting, accounting, financial reporting, personnel, and procurement, and such other staff services as may be needed by the Board, may be obtained by the Board from the Secretary of Commerce or other appropriate sources in the Federal Government. Payment for such services shall be made by the Board, in advance or by reimbursement, from funds of the Board in such amounts as may be agreed upon by the Chairman of the Board and by the source of the services being rendered.

SEC. 12. DELETED

- SEC. 13. (formerly SEC. 12) There are authorized to be appropriated such sums as may be necessary to carry out the provisions of this Act. Appropriations to carry out the provisions of this Act may remain available for obligation and expenditure for such period or periods as may be specified in the Acts making such appropriations.
- SEC. 14. (a) Construction services and materials for Federal facilities shall be procured in accordance with the policies and procedures set forth in chapter 137 of title 10, United States Code, section 2377 of title 10, United States Code, title III of the Federal Property and Administrative Services Act of 1949 (41 U.S.C. 251 et seq.), and section 3(2) of this Act. Determination of a design method shall be based upon preliminary market research as required under section 2377(c) of title 10, United States Code, and section 314B(c) of the Federal Property and Administrative Services Act of 1949 (41 U.S.C. 264b(c)). If the requirements of this Act conflict with the provisions of section 2377 of title 10, United States Code, or section 314B of the Federal Property and Administrative Services Act of 1949, then the provisions of 2377 or 314B shall take precedence.
- (b) In carrying out the policy set forth in section 3 (with particular emphasis on the policy set forth in paragraph (2) of that section) a Federal agency may require that specifications for the acquisition of structures or systems of concrete masonry be expressed under the metric system of measurement, but may not incorporate specifications, that can only be satisfied by hard-metric versions of concrete masonry units, in a solicitation for design or construction of a Federal facility within the United States or its territories, or a portion of said Federal facility, unless the head of the agency determines in writing that--

- (1) hard-metric specifications are necessary in a contract for the repair or replacement of parts of Federal facilities in existence or under construction upon the effective date of the Savings in Construction Act of 1996; or (2) the following 2 criteria are met:
 - (A) the application requires hard-metric concrete masonry units to coordinate dimensionally into 100 millimeter building modules; and
 - (B) the total installed price of hard-metric concrete masonry units is estimated to be equal to or less than the total installed price of using non-hard-metric concrete masonry units. Total installed price estimates shall be based, to the extent available, on cost or pricing data or price analysis, using actual hard-metric and non-hard-metric offers received for comparable existing projects. The head of the agency shall include in the writing required in this subsection an explanation of the factors used to develop the price estimates.
- (c) In carrying out the policy set forth in section 3 (with particular emphasis on the policy set forth in paragraph (2) of that section) a Federal agency may require that specifications for the acquisition of structures or systems of recessed lighting fixtures be expressed under the metric system of measurement, but may not incorporate specifications, that can only be satisfied by hard-metric versions of recessed lighting fixtures, in a solicitation for design or construction of a Federal facility within the United States or its territories unless the head of the agency determines in writing that--
- (1) the predominant voluntary industry consensus standards include the use of hard-metric for the items specified; or
- (2) hard-metric specifications are necessary in a contract for the repair or replacement of parts of Federal facilities in existence or under construction upon the effective date of the Savings in Construction Act of 1996; or
- (3) the following 2 criteria are met:
- (A) the application requires hard-metric recessed lighting fixtures to coordinate dimensionally into 100 millimeter building modules; and
- (B) the total installed price of hard-metric recessed lighting fixtures is estimated to be equal to or less than the total installed price of using non-hard-metric recessed lighting fixtures. Total installed price estimates shall be based, to the extent available, on cost or pricing data or price analysis, using actual hard-metric and non-hard-metric offers received for comparable existing projects. The head of the agency shall include in the writing required in this subsection an explanation of the factors used to develop the price estimates.
- (d) The provisions of subsections (b) and (c) of this section shall not apply to Federal contracts to acquire construction products for the construction of facilities outside of the United States and its territories.
- (e) The provisions contained in subsections (b) and (c) of this section shall expire 10 years from the effective date of the Savings in Construction Act of 1996.
- (f) (1) The head of each executive agency that awards construction contracts within the United States and its territories shall designate a senior agency official to serve as a construction metrication ombudsman who shall be responsible for reviewing and

responding to complaints from prospective bidders, subcontractors, suppliers, or their designated representatives related to--

- (A) guidance or regulations issued by the agency on the use of the metric system of measurement in contracts for the construction of Federal buildings; and
- (B) the use of the metric system of measurement for services and materials required for incorporation in individual projects to construct Federal buildings. The construction metrication ombudsman shall be independent of the contracting officer for construction contracts.
- (2) The ombudsman shall be responsible for ensuring that the agency is not implementing the metric system of measurement in a manner that is impractical or is likely to cause significant inefficiencies or loss of markets to United States firms in violation of the policy stated in section 3(2), or is otherwise inconsistent with guidance issued by the Secretary of Commerce in consultation with the Interagency Council on Metric Policy while ensuring that the goals of the Metric Conversion Act of 1975 are observed.
- (3) The ombudsman shall respond to each complaint in writing within 60 days and make a recommendation to the head of the executive agency for an appropriate resolution thereto. In such a recommendation, the ombudsman shall consider--
 - (A) whether the agency is adequately applying the policies and procedures in this section;
 - (B) whether the availability of hard-metric products and services from United States firms is sufficient to ensure full and open competition; and
 - (C) the total installed price to the Federal Government.
- (4) After the head of the agency has rendered a decision regarding a recommendation of the ombudsman, the ombudsman shall be responsible for communicating the decision to all appropriate policy, design, planning, procurement, and notifying personnel in the agency. The ombudsman shall conduct appropriate monitoring as required to ensure the decision is implemented, and may submit further recommendations, as needed. The head of the agency's decision on the ombudsman's recommendations, and any supporting documentation, shall be provided to affected parties and made available to the public in a timely manner.
- (5) Nothing in this section shall be construed to supersede the bid protest process established under subchapter V of chapter 35 of title 31, United States Code.